

Typhoid Fever Information

General Information

What is typhoid fever?

Typhoid fever is a potentially life-threatening illness that is caused by the bacteria *Salmonella typhi* (*S. typhi*). Persons with typhoid fever carry the bacteria in their bloodstream and intestinal tract and can spread the infection directly to other people by contaminating food or water.

Who gets typhoid fever?

Anyone can get typhoid fever if they drink water or eat food contaminated with the *S. typhi* bacteria. Travelers visiting developing countries are at greatest risk for getting typhoid fever. Typhoid fever is still common in the developing world, where it affects about 12.5 million persons each year. Only about 400 cases occur each year in the United States.

How does typhoid fever spread?

You can get typhoid fever by eating or drinking contaminated food or water. Food or water can be contaminated by a food handler with *S. typhi*, or may be contaminated if sewage accidentally gets into the food or water. Some infected persons may not show any symptoms of typhoid fever but can shed the *S. typhi* bacteria in their feces for many years. These persons are called typhoid fever "carriers". *S. typhi* is only found in humans.

Human Signs and Symptoms

What are the signs and symptoms of typhoid fever?

If you have typhoid fever you may have the following symptoms:

- constant fever up to 104°
- diarrhea
- constipation
- stomach pain
- headache
- malaise
- nonproductive cough
- slow heart rate (bradycardia)
- anorexia

How soon after exposure do symptoms appear?

Symptoms usually occur within 1-2 weeks after exposure to the bacteria, but can occur from 3 days - 3 months after exposure.

How is typhoid fever diagnosed?

Only your doctor can tell if you have typhoid fever. A blood or stool sample is needed to diagnose typhoid fever. The samples are examined for *S. typhi* bacteria.

Treatment Information

How is typhoid fever treated?

Typhoid fever is treated with antibiotics. A person will usually recover in 2-3 days with prompt antibiotic treatment. People that do not get prompt medical treatment may continue to have a fever for weeks or months, and as many as 20% may die from complications of the infection.

If you are being treated for typhoid fever, it is important to do the following:

- Take the prescribed antibiotics for as long as the doctor has asked you to take them.
- Wash your hands carefully with soap and water after using the bathroom
- Do not prepare or serve food to other people.
- Have your doctor collect follow-up stool samples to ensure that no *S. typhi* bacteria remain in your body.

Prevention Information

How can typhoid fever be prevented?

If you travel to an area where the disease is common, use the following steps to protect yourself:

- a) Get vaccinated against typhoid fever. Both injectable and oral vaccines are available. Visit a doctor or travel clinic to discuss your vaccination options. Vaccines are not 100% effective, so it is important to take the additional measures listed to prevent typhoid fever.
- b) Use careful selection of food and drink while you are in a developing country. This will also help protect you from other illnesses such as cholera, dysentery and hepatitis A.
- c) Only use clean water. Buy it bottled or make sure it has been brought to a rolling boil for at least one minute before you drink it. Bottled carbonated water is safer than uncarbonated water.
- d) Ask for drinks without ice unless the ice is made from bottled or boiled water.
- e) Only eat foods that have been thoroughly cooked.
- f) Avoid raw vegetables and fruits that cannot be peeled.
- g) When you eat raw fruits or vegetables that can be peeled, wash your hands with soap, then peel them yourself. Do not eat the peelings.
- h) Avoid foods and beverages from street vendors. Many travelers get sick from food bought from street vendors.

Remember:

1. Even if your symptoms go away without treatment, you may still be carrying the *S. typhi* bacteria, and your illness could return and be passed to other people.
2. If you work at a job where you handle food or care for small children, you should not go back to work until a doctor has determined that you no longer carry any *S. typhi* bacteria.
3. Even if you are vaccinated, you should carefully select your food and drink, especially when visiting areas where typhoid fever is common.

Where Can I Get More Information?

- Your personal doctor.
- Your local health department listed in your telephone directory.
- The Utah Department of Health, Office of Epidemiology (801) 538-6191 or Immunization Program (801) 538-9450.
- The Division of Quarantine, National Center for Infectious Diseases, Centers for Disease Control and Prevention has information on typhoid fever and other diseases for travelers at: <http://www.cdc.gov/travel/index.htm>.

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Call your local health department or
1-888-EPI-UTAH to report outbreaks of disease

